

forward so as to conform to the shape of the forward extending wall 14a of the extension case 14 to increase the volumes of the pressure-compensating air chambers 82R and 82L to the largest possible extent in the limited space under the forward extending wall 14a of the extension case 14 at the low level.

[140] The shift rod consists of the upper shift rod 26 and the lower shift rod 27, the lower shift rod 27 is extended through the covering member 80, and the upper end part 27a of the lower shift rod 27 projects upward from the covering member 80. Therefore, the gear case 15 and the components contained in the gear case can be easily assembled in a unit. Since the lower shift rod 27 turns about its axis and does not move vertically relative to the covering member 80, the gap between the lower shift rod 27 and the covering member 80 can be perfectly sealed.

What is claimed is:

1. A gear case assembly with a pressure-compensating function forming a lower part of a marine propulsion machine, said gear case assembly comprising:

a gear case provided with a vertical drive shaft receiving bore in which a drive shaft is supported for rotation, a gear chamber connected to the lower end of the drive shaft receiving bore and containing a bevel gear mechanism for transmitting power from the drive shaft to a propeller shaft, and a forward/backward selector clutch mechanism, a shift rod receiving bore parallel to the drive shaft receiving bore, receiving a shift rod for operating the forward/backward selector clutch mechanism and having an open upper end opening in an upper surface of the gear case, and a connecting hole connecting an upper part of the drive shaft receiving bore and an upper part of the shift rod receiving bore; and

a covering member attached to the upper surface of the gear case so as to cover the open upper end of the shift rod receiving bore, provided with an opening through which the shift rod is passed into the shift rod receiving bore, and having a body part, and a pressure-compensating wall bulging upward from the body part and defining a pressure-compensating chamber.

2. The gear case assembly with a pressure-compensating function according to claim 1, wherein the shift rod is of a type to select a forward drive mode or a backward drive mode

when the same is turned.

3. The gear case assembly with a pressure-compensating function according to claim 1, wherein the shift rod is divided into an upper shift rod and a lower shift rod, and the lower shift rod has an upper end part that extends through the covering member, projects upward from the covering member and is coupled with a lower end part of the upper shift rod.

4. The gear case assembly with a pressure-compensating function according to claim 1, wherein the covering member has a shift rod support part extending beneath an upper surface of the gear case, and the pressure-compensating wall lies above the upper surface of the gear case.

5. The gear case assembly with a pressure-compensating function according to claim 5, wherein the covering member has an inner cylindrical part that supports the shift rod passed therethrough, and an outer cylindrical part formed integrally with the inner cylindrical part, the inner and the outer cylindrical part are connected by the upward bulging pressure-compensating wall defining the pressure-compensating chamber opening downward.

6. The gear case assembly with a pressure-compensating function according to claim 5, wherein the inner cylindrical part has an upper expanded part, and an annular sealing member fitted on the shift rod is fitted in the upper expanded part of the inner cylindrical part.

7. The gear case assembly with a pressure-compensating function according to claim 5, wherein the outer cylindrical part is formed in a size that permits the outer cylindrical part to be fitted in an upper part of the shift rod receiving bore, and an O-ring is put in an annular groove formed in the outside surface of the outer cylindrical part.

8. The gear case assembly with a pressure-compensating function according to claim 6, wherein an upper surface of the covering member excluding the upward bulging pressure-compensating wall is flush with an upper end surface of the annular sealing member fitted in the inner cylindrical part of the covering member, and extends to a peripheral edge of the covering member.

9. The gear case assembly with a pressure-compensating function according to claim 1, wherein the covering member is provided with a pair of upward bulging pressure-compensating walls respectively defining pressure-compensating chambers, and separated from each other by a groove.